

MODULATORS OF THE HYPOCRETIN SYSTEM AND
METHODS OF SCREENING THEREFOR

ABSTRACT OF THE DISCLOSURE

Methods for modulating the hypocretin system, as well as methods for identifying compounds that act as hypocretin-system modulators are provided. In modulating the hypocretin system, the method comprises administering a therapeutically effective amount of a preprohypocretin-expression modulator to an individual, wherein the preprohypocretin-expression modulator alters preprohypocretin expression in preprohypocretin-expressing cells. The method for identifying compounds comprises contacting a test compound to cells equipped with the 5' flanking promoter of the preprohypocretin gene operably linked to a nucleic acid sequence and determining whether the test compound alters transcription of the nucleic acid sequence in the cell, wherein the test compound's ability to alter transcription is indicative of a compound that modulates the hypocretin system. The invention also provides compounds, pharmaceutical compositions, nucleic acid sequences, expression vectors, transformed host cells, and the like for carrying out the methods.